STREAM BUFFER ENCROACHMENT

Stream Buffers are impacted by this project.
The Contractor is not authorized to enter into stream buffers, except as discribed in the table below:

Name (name or number of feature)	Location of Buffered Streams and State Waters**			Stream Type (Warm/Cold Water)*	Buffer Impacted? (Yes/No)	Buffer Variance Required?
	Alignment	Begin Sta (LT or RT)	End Sta (LT or RT)			
Pond #2	SR 154	Sta. 112+00.00 LT.	Sta. 114+00.00 LT.	Warm	Yes	Yes
Per environmental commitments/requirement, a stream buffer varience (SBV) from Georgia Environmental Protection Division (EPD) would be obtained for 130 feet of stream buffer. Distrurbance activities consist of associated grading to exsiting terrain due to full depth widening construction. The allowable activities consist of contractor permitted to work within limits of orange barrier fence and sediment barrier.						
Stream #8	SR 154	Sta. 106+90.00 LT.& RT.	Sta. 107+67.00 LT.& RT.	Warm	Yes	No
Distrurbance activities consist of associated grading to exsiting terrain due to removal of existing 7'x7' box culvert and installation of 20'x9' bottomless culvert. The allowable activities consist of contractor permitted to work within an area of 50 feet to left and right of bottomless culvert.						
Stream #5	SR 154	Sta. 110+20.00 RT. Sta. 110+90.00 LT.	Sta. 111+55.00 RT. Sta. 111+90.00 LT.	Warm	Yes	Yes
Distrurbance activities consist of associated grading to exsiting terrain due to removal of existing double 7'x7' box culvert, installation of 28'x11' bottomless culvert, and steel casings around existing waterlines. The allowable activities consist of contractor permitted to work within an area of 50 feet to left and right of bottomless culvert.						
Stream #3	SR 154	Sta. 111+55.00 RT.	Sta. 114+00.00 RT.	Warm	Yes	Yes
A buffer variance was approved for the installation of steel casings around existing waterlines, for demolition and removal of existing pavement, minor clearing and grading activities. These are the only allowable activities within the stream buffer.						

* Warm water streams have a 25-foot minimum buffer as measured from the wrested vegetation.
Cold Water streams have a 50-foot buffer as measured from the wrested vegetation.
** Locations are approximate, a detailed location of stream buffers and authorized work areas are shown on the individual BMP sheets.

MONITORING GENERAL NOTES:

Representative sampling may be utilized on this project. The characteristics of the individual watersheds along the project corridor have been carefully evaluated and compared on the basis of drainage characteristics, watershed size, land disturbance and earth work. After evaluation of these items as presented in the projects drainage area maps, hydrology and hydraulic studies, construction plans and erosion sedimentation and pollution control plans, it has been determined that the increase in turbidity at the specified locations will be representative of the increase in turbidity for all waters leaving the site. Approved primary and alternate representative monitoring sites are identified in the table:

Monitoring site	Primary or Alternate Site	Location (Sta. and Side)	Offset	Name of Receiving water	Applicable construction stage for monitoring	Sampling Type (Outfall or Receiving Water)	Total Project Size	Drainage Area	Disturbed Area	Warm or Cold water Stream	Appendix B NTU value (outfall Monitoring Only)	Allowable NTU Increase (For Receiving Water)	Location Description
1.	Primary	STA 107+30 LT&RT	60' LT & 70' RT	Shoal Creek	Stage 1 & 2	Receiving Water	5.40 Acres	1.1 Sq. Miles	1.39 Acres	Warm	N/A	25	SR 154 20' x 9' Bottomless Culvert
2.	Alternate	STA 101+26 RT	120' RT	Shoal Creek	Stage 1 & 2	Outfall	5.40 Acres	1.41 AC	0.49 Acres	Warm	75	N/A	SR 154 6" PVC Pipe

The primary site specified should be used as the initial sampling location. The alternate sampling sites may be used if additional sampling is required and/or if the primary sampling site is no longer located within the active phase of construction.

MONITORING SAMPLING METHODS & PROCEDURES

See Special Provision 167 and other contract documents for Monitoring Sampling Methods and Procedures.

READY MIX CHUTE WASH-DOWN

USE ON CONSTRUCTION 3-28-11

The washing of ready-mix concrete drums and dump truck bodies used in the delivery of portland cement concrete is prohibited on this site. In accordance with standard Specification 107 - Legal Regulations and Responsibility to the Public, only the discharge "chute" utilized in portland cement concrete delivery may be rinsed free of fresh concrete remains. The Contractor shall excavate a pit outside of State water buffers, at least 25 feet from any storm drain and outside of the travel way, including shoulders, for a wash/pit area. The pit shall be large enough to store all wash-down water without overtopping the pit. Immediately After the wash-down operations are completed and after the wash-down water has soaked into the ground, the pit shall be filled in, and the ground above shall be graded to match the elevation of the surrounding areas smoothed out. Alternate wash down plans must be approved by the Project Engineer.

Wash-down plans describe procedures that prevent wash down water from entering streams and rivers. Never dispose of wash-down water down a storm drain. Establish a wash-down water pit location that includes the following: (1) the pit is located away from a storm drain, stream or river, (2) the pit is accessible to the vehicle being used for wash-down, (3) the pit has enough volume for wash-down water, and (4) make sure you have permission to use the area for wash-down. On some sites, you may not have permission or access to a location which allows for a wash-down pit. In those cases, the Contractor may have to wash-down into a wheelbarrow or other container and carry the container for transport to a proper disposal site. For additional information, refer to the Georgia Small Business Environmental Assistance Program's" A Guide for Ready Mix Chute/Hopper Wash-down".

STORM DRAIN OUTLET PROTECTION

STATION	OFFSET	PIPE SIZE (FT)	STRUCTURE NUMBER	FLOW RATE (CFS)	VELOCITY (FPS)	TAILWATER CONDITION (FT)	La LENGTH OF APRON (FT)	W1 WIDTH AT HEADWALL (FT)	W2 DOWNSTREAM WIDTH (FT)	d50 RIP RAP SIZE (FT)	D STONE DEPTH (IN)
101+26 RT	120	0.5	N/A	1	3.22	N/A	2.5	1.5	3	0.2	18
103+50 RT	50	1.5	C-3	8.58	6.58	N/A	20	30	30	0.3	18
108+57 LT	62	1.5	E-2	1.46	7.70	N/A	9	4.5	10.5	0.3	18
116+00 RT	42	4	DITCH	8.22	4.47	N/A	13	12	17	0.3	18
116+37 LT	41	4	DITCH	8.68	4.08	N/A	13	12	17	0.3	18
12+04 RT	56	2	D-3	11	5.37	N/A	13	6	15	0.4	18
12+60 RT	63	2	DITCH	13.78	5.37	N/A	13	6	15	0.4	18

DISCHARGES INTO, OR WITHIN ONE LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF A BIOTA IMPAIRED STREAM SEGMENT.

All outfalls are either located further than 1 linear mile upstream or outside of the watershed of an Impaired Stream Segment that has been listed for criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macro Invertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff).

RETENTION OF RECORDS

The Department will retain records in accordance with Part IV.F of General Permit GAR100002

ALTERNATE BMP'S

Silt gates are not used as alternatives to conventional BMP's. Silt gates are used as additional BMP's above and beyond what is required.

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REVISION DATES
3-28-2011

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: ROAD AND AIRPORT DESIGN

ESPC GENERAL NOTES

HAMMOCK ROAD AT SR 154

DRAWING No. 51-02